



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

649.8301

Job Sheet 186023



904
Dec 12

Part No: 649.8301

Job Qty: 4 ea

Part Name: Cutter Sub Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/8/18

Job Tracking No:

Due Date: 11/29/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV N/C IPP REV:A NEW ISSUE 13-10-23 JLM VERIFIED BY:DD

Ship Via:

6446

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea	11/29/18	11/29/18	0.00	0.00	Start Up Stores/Pkg-1	9-80	NOV 13 2018
110	Packaging	4 pcs	11/29/18	11/29/18	0.00	0.00	Packaging1-1	9-80	NOV 13 2018
120	Small Fab	4 pcs	11/29/18	11/29/18	0.00	0.10	Small Fab-1	9-80	NOV 13 2018
130	QC	4 pcs	11/29/18	11/29/18	0.00	0.00	QC5	9-80	NOV 16 2018
140	Packaging	4 pcs	11/29/18	11/29/18	0.00	0.00	Packaging3-1	9-80	NOV 19 2018
150	QC21-SA	4 Ea	11/29/18	11/29/18	0.00	0.00	QC21	9-80	NOV 19 2018

Part Op 120 - Assemble as per dwg and apply loctite 598 on all faying surfaces per note . A/R RTV LOCTITE 598:
Descriptions: exp. date:

140 - ***IDENTIFY AS PER IAW MPP-120***

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
646.9711	Blade	8 Ea (2 ea)	90-Start up Operation	5104600
649.8310	Cutter Body	4 Ea (1 ea)	90-Start up Operation	5128927
MS21042L08	Nut	24 Ea (6 ea)	90-Start up Operation	5100409
MS27039-08-19	Screw	24 Ea (6 ea)	90-Start up Operation	5104359
NAS1149FN832P	Washer	48 Ea (12 ea)	90-Start up Operation	3100408

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	646.9711	8	127	0
	649.8310	4	12	0
	MS21042L08	24	1,728	0
	MS27039-08-19	24	1,598	0
	NAS1149FN832P	48	2,487	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:12.5%;">Skid-tube ☐</td> <td style="width:12.5%;">Cross tube ☐</td> <td style="width:12.5%;">Water Jet ☐</td> <td style="width:12.5%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																									
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																										
Work Order Deviation				Disposition				Completed By																																									
								Lead hand / Supervisor Approval Verification																																									
								QC / QA Coordinator Approval																																									
Intern: _____ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="width:12.5%;">Pressure/Forced ☐</td> <td style="width:12.5%;">Temperature/Cure ☐</td> <td style="width:12.5%;">Power Loss/Surge ☐</td> <td style="width:12.5%;">Positioned Wrong ☐</td> </tr> <tr> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> <td>Finish ☐</td> </tr> <tr> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> <td>Turning Sequence ☐</td> </tr> </table>						Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
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				OTHER :																																													

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 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 CANADA
 TEL.: 1 613 532-5200
 Email: sales@dartaero.com
 www.dartaerospace.com



Container No: S127450

 Part: 649.8301
 Job No: 186023
 Serial No/Batch: S127450

Date: 11/13/18

 Revision: _____
 Inspector: _____
 Exp Date: _____
 Instructions: _____

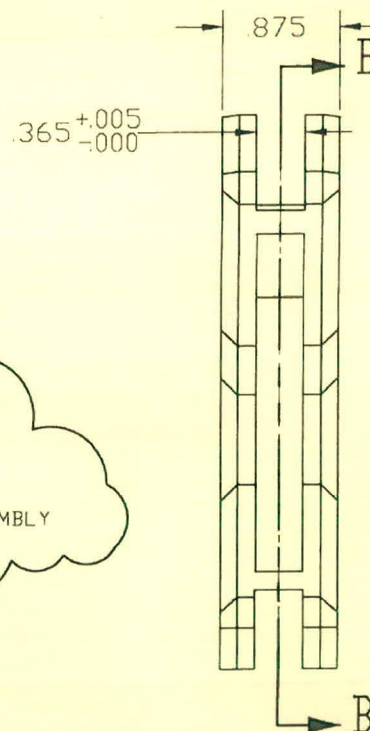
APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTIC NO. 03524				SHEET OF 1	
	DWG NO. 649.8300	REV: NC	PREPARED BY S. COCHRAN	DATE: 05/23/12	EFFECT ON DWG: ☐ INC. ☒ UNINC.	
	DWG TITLE: CUTTER SUB ASSY					
APPROVED BY: ENGR <i>[Signature]</i>		MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: CURRENT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REMOVED NOTE 6, REVISED CUT OUT DIMENSION				

SHEET 1, ZONE A1 IS:

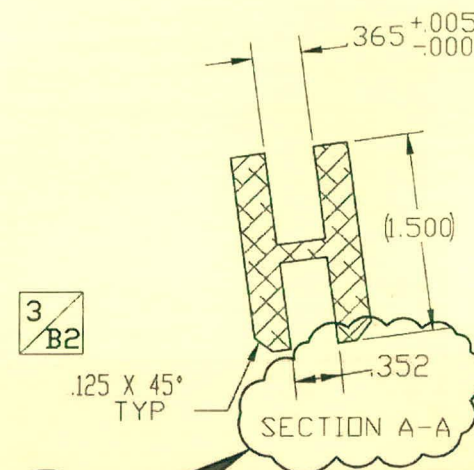
NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; PRETREAT PRC-DESOTO PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J TYPE I CLASS N; 1-2 MIL MAX
- 3 DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED
- 4 IDENTIFY IAW MPP-120
- 5 APPLY F/N 6 AS REQUIRED TO ALL FAYING SURFACES OF F/N 5 UPON ASSEMBLY

IS



SHEET 2, ZONE D8 IS:



IS

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 186023 *HW*
18-11-09

DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRU ☐ ICA ☐ BOM

CHANGE CATEGORY
☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED
☐ YES ☒ NO

1 2 3 4 5 6 7 8

FORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
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THE PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REV.	DESCRIPTION	DATE	APPROVED
N/C	INITIAL RELEASE	04-18-12	P. BRAVO

1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12

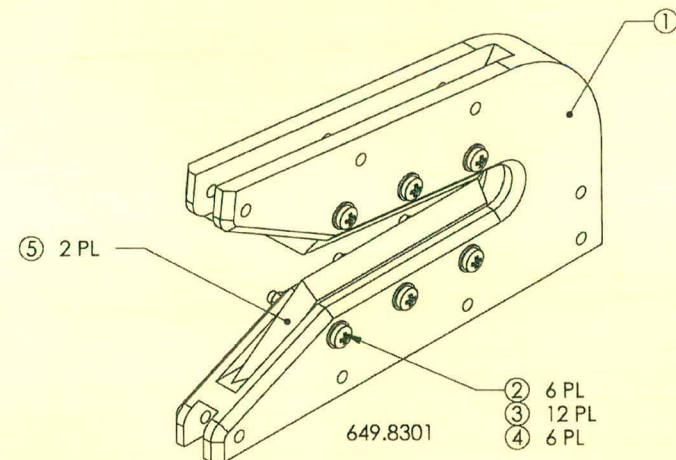
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PRIME IAW MIL-P-23377 J TYPE I CLASS N; 1-2 MIL MAX

3. DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED

4. IDENTIFY IAW MPP-120

5 APPLY F/N 6 AS REQUIRED TO ALL FAYING SURFACES OF F/N 5 UPON ASSEMBLY

6 CUTTING EDGE INTENDED TO BE SHARP, DO NOT BREAK SHARP EDGE



UNINCORPORATED ECN(s)

03524

A/R	6	601.2764	RTV	LOCTITE 598	
2	5	646.9711	BLADE		
6	4	601.1541	LOCKNUT	MS21042L08	
12	3	601.2764	WASHER	NAS1149FN832P	
6	2	601.2765	SCREW	MS27039-0819	
1	1	649.8310	CUTTER BODY		△
1	1	649.8301	CUTTER ASSY		△
.8301	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
QTY			PARTS LIST		
NEXT ASSY [S]			APICAL INDUSTRIES		
649.4900			2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300		
			CUTTER SUB ASSY		
ORIGINAL DATE 04-17-12 DRAWN BY T. COCHRAN CHECKED P. BRAVO DRAWING APPROVAL P. BRAVO BUILD TO CONTRACT NO.			SIZE CAGE CODE DWG. NO. 649.8300 REV. NC		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .010 3 PLACE DECIMALS ± .005 ANGLES ± .5°			SCALE NONE		
			SHEET 1 OF 4		

Linda Lacelle

From: Linda Lacelle
Sent: Wednesday, November 7, 2018 11:21 AM
To: Patrick Duval; Caitlin Crooks
Cc: Jason Leroux; Jean-Luc Menard; Marc Bellavance
Subject: RE: 649.4701- rev C
Attachments: 649.4900 A1 CUTTER ASSY.pdf

Thx Pat
Pls see below

From: Patrick Duval
Sent: Tuesday, November 6, 2018 5:43 PM
To: Caitlin Crooks <ccrooks@dartaero.com>; Linda Lacelle <llacelle@dartaero.com>
Cc: Jason Leroux <jleroux@dartaero.com>; Jean-Luc Menard <jmenard@dartaero.com>; Marc Bellavance <mbellavance@dartaero.com>
Subject: RE: 649.4701- rev C

Linda,
Here's a quick list of what I will need in order the make my kit to rev C.

649.5111 need some at rev A1 (got some in quarantine) – are these good to use?
649.5112 need some at rev A1 (got some in quarantine) – are these good to use?
649.4811 need some at rev A – WJ>OS – approx. 3wks
649.4816 need some at rev A – WJ>OS – approx. 3wks
649.4813 need some at rev A – WJ>OS – approx. 3wks
649.5214 need some at rev A – Machining>OS- approx. 4-5wks aro
649.5010 need some at rev C1 – Machining>OS- approx. 4-5wks aro
649.4902 need some at rev A – do the 649.5301 and 649.8301 need to be at an older rev? see attached

x 4 each

Rev RA

Also for me to complete the kit from RA173 we will need to add, remove some of the hardware to make it as per rev C.

Sorry for the delay... this is a big mess and I don't what to rush and ship something that's not good.

Pat Duval
QC Coordinator

1

2

